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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,177	01/30/2004	Keith R. Carver	41489	4696
1609	7590	05/03/2005	EXAMINER	
ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W. SUITE 600 WASHINGTON,, DC 20036			FIGUEROA, FELIX O	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/767,177

Applicant(s)

CARVER, KEITH R.

Examiner

Felix O. Figueroa

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 26-32 and 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 33-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 26-32 and 37-39 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/24/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group I in the reply filed on March 14, 2005 is acknowledged. The traversal is on the ground(s) that searching one of the groups requires searching the other. This is not found persuasive because Group II (drawn to a method of connecting electrical elements) is classified class 29, which is not required for Group I.

The requirement is still deemed proper and is therefore made FINAL.

Applicant's election of Species I (Figs.1-12) in the reply filed on March 14, 2005 is also acknowledged.

### ***Specification***

The specification is objected because any abbreviation must be written out initially. Therefore, "PVC" and "TPR" in page 9 paragraph 43, should be written out initially.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 15, 16-18 and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Meredith (US 5,655,936).

Meredith discloses an electrical connector comprising a first electrical conduit (22) assembly having a first conductive contact (10) and an aperture (28) in the first conductive contact; a first fastener (16) rotatably received in the aperture, the first fastener having a head member (at top) and a body portion (at bottom), a threaded passageway (17) extending from the head member to a distal end of the body portion, the distal end of the body portion being swaged to prevent the first fastener from being accidentally removed from the aperture; a second electrical conduit assembly having a second conductive contact (14); and a second fastener (12) extending outwardly from the second conductive contact and adapted to be threadably received by the passageway of the first fastener.

Regarding claim 16, Meredith discloses a terminal for an electrical conduit, comprising: a conductive contact (10) having an aperture (28) therein; a conductive securing member (16) having a support section (top) and a first locking section (bottom); the conductive securing member having a threaded through passageway (17) adapted to threadably receive another terminal (12); the securing member support section being rotatably received in the aperture in the conductive contact, the locking section being formed after the support section is received in the aperture; and a second locking section (under surface 34) associated with the conductive contact to resist removal of the conductive securing member from the conductive contact by engaging the first locking section on the securing member.

Regarding claims 17 and 18, Meredith discloses the first locking section being swaged; and the support section being larger than the aperture.

Regarding claim 33, Meredith discloses an electrical connector comprising a first electrical conduit assembly having a first conductive contact (10) and a first aperture (28) in said first conductive contact; a first fastener (16) rotatably received in said first aperture, said first fastener having a head member (top) and a body portion (bottom), a part of said body portion being swaged to prevent said first fastener from being accidentally removed from said first aperture; and a second electrical conduit assembly having a second conductive contact (at 14), said second conductive conduct being adapted to threadably engage said first fastener.

Regarding claim 34, Meredith discloses the first fastener having a threaded passageway (17) extending from said head member to said distal end of said body portion.

Regarding claim 35, Meredith discloses a second fastener (12) extending outwardly from said second conductive contact, and being adapted to be received by said first fastener threaded passageway.

Regarding claim 36, Meredith discloses a portion (17) of said body portion of said first fastener is threaded.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith in view of Kue (US 5,975,821).

Meredith discloses substantially the claimed invention except for the washer. Kue teaches the use of a (Belleville) washer (90) between a first contact (72) and a head member of a first fastener (70). This arrangement improves electrical and mechanical performance in vibrating environments. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Meredith with a washer between a first contact and the head member of the first fastener, as taught by Kue, to improve electrical and mechanical performance in vibrating environments.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith in view of Krause (US 6,343,962).

Meredith discloses substantially the claimed invention except for the countersunk aperture. Krause teaches a conductive contact (14) having a countersunk aperture receiving a first fastener (16). This arrangement reduces stress on the fastener while providing a secure connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Meredith with a countersunk aperture, as taught by Krause, to reduce stress on the fastener while providing a secure connection.

Claims 5, 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith in view of Bentrin (US 6,866,456).

Meredith discloses substantially the claimed invention except for the spacer. Bentrim teaches the use of a spacer (15) having a first (countersunk) opening and disposed on a proximal end of fastener (11) to allow for a floating connection and thus facilitate connection with the mating part. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Meredith with a spacer, as taught by Bentrim, to allow for a floating connection and thus facilitate connection with the mating part.

Regarding claim 12, Meredith, as modified by Bentrim, discloses substantially the claimed invention except for the material of the spacer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use brass as the preferred material for the spacer in order to provide corrosion resistance and cold workability, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.

Claims 7-10, 13, 14 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith in view of Rowls et al. (US 3,775,730).

Meredith discloses substantially the claimed invention except for the boot assembly. Rowls teaches a boot assembly (10) disposed on the first conductive contact (24); the boot assembly having a cap (52) adapted to cover the head member (not labeled) of a first fastener (28); and having a second opening; the boot cap having a circumferential groove (under 58) on an inner wall received by a recess (under 50) of the fastener; in order to protect the conductive contact and the fastener. Therefore, it

would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Meredith with a boot assembly and a boot cap, as taught by Rowls, to protect the conductive contact and the fastener.

Regarding claims 13 and 14, Meredith, as modified by Rowls, discloses substantially the claimed invention except for the specific material of the boot assembly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use PVC, TPR or silicon as the preferred material for the boot assembly in order to reduce cost by using material that are readily available, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.

Claims 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith.

Meredith discloses substantially the claimed invention except for the material of the fastener / securing member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use brass as the preferred material for the first fastener in order to provide corrosion resistance and cold workability, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.



**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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